

Applicants: Goto et al.
Ser. No. 08/915,004
Filed: February 20, 1996
Atty. Docket No.: FJN-060
Page 52

Page 86, Line 3, delete "Decrease of" and insert --A decrease in--; delete "the animals of control groups" and insert --control animals--;

Line 5, delete "groups" and insert --group--; delete "animal" and insert --animals that--;

Line 7, after "inhibits" insert --the--;

Line 8, delete "a" and insert --an--; delete "to produce" and insert --for producing--;

Line 9, delete "has an activity to inhibit" and insert --inhibits the--;

Line 11, delete "accompanying" and insert --accompanied by--; delete "to be used" and insert --to prepare antibodies useful for--; and

Line 13, delete "microorgainsm" and insert --microorganism--.

IN THE CLAIMS:

Please cancel non-elected claims ~~7-9, 15, 17, 18, 20, 21, 23, 24 and 26-31~~, without prejudice.

Please amend claims 1, 2, 4, 10, 11 and 12 as follows:

-
1. (Amended) An osteoclastogenesis inhibitory factor protein comprising the following properties:
- (a) molecular weights as determined by SDS-polyacrylamide gel electrophoresis (SDS-PAGE) of approximately 60 kD under reducing conditions, and approximately 60 kD (a monomer) and 120 kD (a homodimer) under non-reducing conditions;
- (b) high affinity to cation-exchange resins and heparin [derivatized substrates] derivatives;
- Bj*

Applicants: Goto et al.
Ser. No. 08/915,004
Filed: February 20, 1996
Atty. Docket No.: FJN-060
Page 53

- B3 CONCL'd
- (c) [inhibition activity: inhibits] inhibitory activity for osteoclast differentiation [or] and/or maturation, wherein [the inhibition] said activity is decreased by heating said protein at about 70°C for about 10 min. or at about 56°C for about 30 min., and wherein said activity is lost by heating at about 90°C for about 10 min.; and
 - (d) an internal amino acid [sequences substantially in accordance with Seq. ID Nos. 1, 2 and 3] sequence as provided in Seq. ID Nos. 1, 2 or 3.

2. (Amended) The protein of claim 1 comprising the N-terminal amino acid [sequences] sequence provided in Seq. ID No. 7.

B3

4. (Amended) A method of producing an osteoclastogenesis inhibitory factor protein comprising the steps of :

- (a) cultivating human fibroblast cells;
- (b) [forming a lysate] producing conditioned medium of said fibroblast cells; and
- (c) [separating] isolating said factor from said fibroblast cell [lysate] conditioned medium by a combination of ion-exchange, affinity, and reverse phase chromatography, wherein said factor comprises an internal amino acid sequence as provided in SEQ. ID. No. 1, 2, or 3.

10. (Amended) A protein expressed from a cDNA encoding an amino acid sequence as provided in Seq. ID No. 4.

B4

11. (Amended) A protein having a biological activity [to inhibit] for inhibiting osteoclast differentiation [or] and/or maturation, said protein having an amino acid sequence expressed from a cDNA sharing at least about 80% sequence identity with the amino acid sequence provided in Seq. ID No. 4.

Applicants: Goto et al.
Ser. No. 08/915,004
Filed: February 20, 1996
Atty. Docket No.: FJN-060
Page 54

12. (Amended) A recombinant protein which inhibits osteoclast differentiation [or] and/or maturation, expressed from a cDNA encoding an amino acid sequence as provided in Seq. ID No. 4[;], said protein comprising the following properties:
- (a) molecular weights as determined by SDS-polyacrylamide gel electrophoresis (SDS-PAGE) of approximately 60 kD under reducing conditions, and approximately 60 kD (a monomer) and 120 kD (a homodimer) under non-reducing conditions;
 - (b) high affinity to cation-exchange resins and heparin derivatized substrates;
 - (c) inhibitory activity[: inhibits] for osteoclast differentiation [or] and/or maturation, wherein said activity is decreased by heating said protein at about 70°C for about 10 min. or at about 56°C for about 30 min., and wherein said activity is lost by heating at about 90°C for about 10 min.; and
 - (d) an internal amino acid sequence as provided in Seq. ID [Nos. 1-3] No. 1, 2 or 3.
- BH
Concl'd*

REMARKS

I. Restriction Requirement Under 35 U.S.C. §121

The Examiner required restriction of the claims. On December 2, 1997, a provisional election was made, with traverse, to prosecute the claims of Group I, claims 1-6, 10-14, 16, 19, 22 and 25. Applicants hereby affirm the election of claims 1-6, 10-14, 16, 19, 22 and 25. In so doing, Applicants do not waive or abandon any rights in the non-elected inventions. Claims 7-9, 15, 17, 18, 20, 21, 23, 24 and 26-31 are being canceled without prejudice to their being revived in a subsequent application.